

A Thesis

NO 29

By

George Thurst

Of

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W. S. H.

Virginia

On

Cholera Infantum

1826



## Cholera Infantum

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This disease becomes most prevalent, and is attended with symptoms of the greatest danger during the warm months of summer and beginning of autumn.

It prevails in most of the large towns of the United States. It generally occurs in the Southern States in April and May, but I am informed it seldom appears in Philadelphia, or New York until June, or July and continues generally till the latter end of September. Children are most subject to its attacks from about the fifth or sixth month, until the



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second year of their age. It attacks them occasionally at a later period, but not with such violence, nor in so dangerous a form.

The predisposing cause of Cholera Infantum, is the warmth and impurity of the air of large cities, villages, and country seats. The chief exciting causes, improprieties in articles of clothing and Diet. Sudden changes in the atmosphere from heat, to cold, and from dryness to humidity, are also calculated to bring it into action. The fruits of the season, are a most prolific source of this disease,



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Children under their third  
year, should indulge very spar-  
ingly in their use. Cholera  
Infantum is often aggravated  
by teething, worms, & premature  
weaning. &c

Symptoms. It sometimes  
comes on with a Diarrhoea,  
which continues for several  
days without any other symp-  
tom of indisposition, but in  
its more violent forms, there  
are vomitings, and purgings,  
occurring at the same time,  
or alternating with each other,  
and attended with no inconsiderable  
spasmodick uneasiness,  
constituting the Cholera  
Morbus of persons far

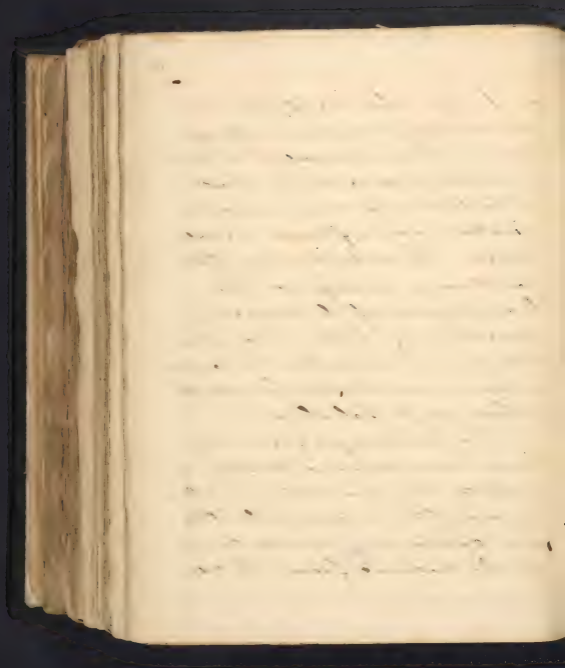


then advanced in life. The  
 fever which soon supervenes,  
 is of the remittent type, with  
 evident exacerbations in the  
 evening. The pulse is usual-  
 ly small, quick, and feeble,  
 or irritated, and chorded. The  
 head is much affected, as  
 is manifested by a tendency  
 to stupor, or delirium, or some-  
 times even to mania. This  
 cerebral affection is also de-  
 noted by the eyes, they are  
 either fierce, or languid in  
 expression, and when the pa-  
 tient sleeps, are half closed.  
 In some instances the insen-  
 sibility of the system is so  
 great, that flies alight



on the eyes when half open without exciting a motion in the eyelids for their removal. The thirst is intense, and no drink is palatable but cold water, which is rejected soon after it is swallowed. The distribution of temperature is unequal, the head, regions of the stomach, & bowels being hot, while the extremities are cold. The tongue is sometimes white & furred, at others dry & polished.

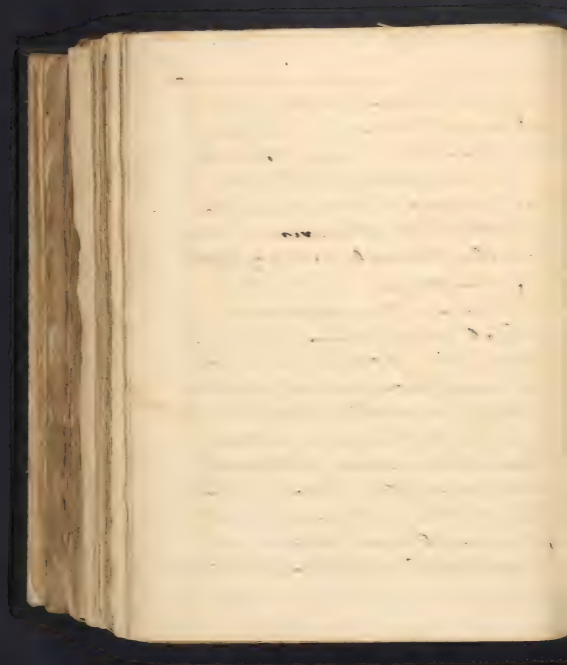
The discharges from the bowels are various, most frequently they are watery or slimy and often tinged with blood, and containing small lumps of the natural faeces. The colour



is green, yellow, or bluish,  
white, or brown, and they may  
be inodorous, or very offensive.

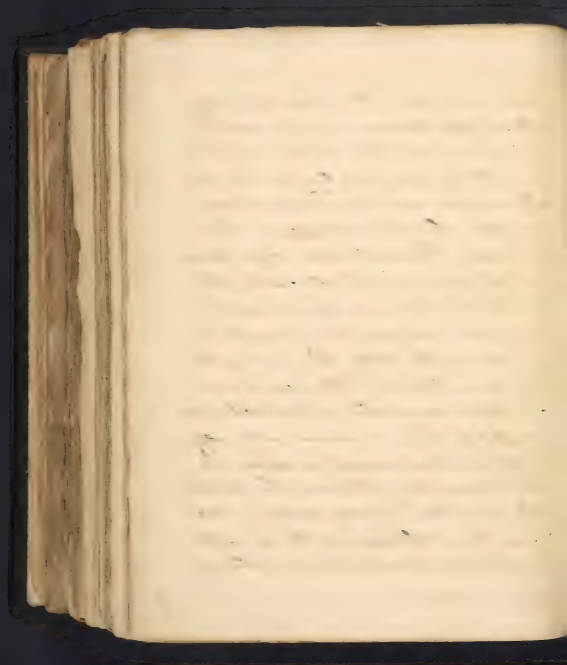
The irritability of the alimen-  
tary canal, is sometimes so  
great, that whatever is taken  
into the stomach rapidly passes  
off unaltered.

There are few diseases in  
which emaciation more rap-  
idly takes place. The child  
becomes pallid, and the flesh  
flabby, and the cambric in-  
teguiments hang in folds,  
fluid spots appear, followed by  
ulcerations, the abdomen becomes  
tumid, the feet oedematous,  
the mouth and tongue are  
covered with a white, The cheeks



are sunken, The nose is sharp, the lips become shrivelled, the skin on the forehead is tight as if bound to the bone, and the eyes are sunken. Even under these menacing circumstances, which would seem to denote immediate dissolution, life in some instances is protracted for four or five weeks, and the patient may ultimately recover.

But as death approaches, the symptoms are gradually aggravated, the mind as well as the senses, is obtuse, the child thrusts its fingers into the back part of the mouth, as if desirous to remove something



from the throat. There is a <sup>3</sup>egg-  
 tallum eruptions on the chest  
 of innumerable watery Venicles  
 of a very minute size. A low  
 warm or warm sometimes  
 escape in this stage of the  
 disease. The two last symptoms  
 I believe were first noticed  
 by Dr Dewees, and which by  
 him in conjunction with the  
 one immediately preceding them  
 are said to be always fatal

In some instances the pro-  
 gress of this disease is more  
 rapid, especially when it  
 puts on the character of Chol-  
 era Morbus, or Dysentery and  
 runs the course of these af-  
 fections. Death in the form of



these instances may occur in twenty four hours, and in the latter from three to ten or fifteen days.

The peculiar symptoms of this disease, in its genuine form, will always serve to distinguish it from any other, therefore I shall not dwell on its Diagnosis. When it takes on the character of Cholera Morbus, Dysentery, or Diarrhoea, it may be considered as such and treated accordingly. It may be confounded with the irritation of teething, and that produced by worms. The seasons of the year, the wide spreading of Cholera-



Infantum, and the Secutiar  
symptoms of these two diseases,  
will serve to distinguish them  
from the subject of this essay.

It is true that Cholera In-  
fantum, like other Gastro-  
intestinal diseases, may occur  
at any season, but like the  
latter is more violent and  
diffusive under the particular  
epidemic influence of the  
Season.

The Prognosis is by far more  
embarrassing, since death some-  
times takes place most unex-  
pectedly, and recoveries occur  
under circumstances, apparently  
most desperate. When in the  
form of Cholera Infantum, it



frequently grows suddenly  
 fatal. But we may consider  
 the patient as doing well,  
 when there is restoration of  
 temperature, the pulse becom-  
 ing fuller, slower, and  
 more natural. A subsidence  
 of the irritability of the Sto-  
 mach and bowels, the Stool,  
 assuming a healthy aspect,  
 denoting a restoration of the  
 functions of the Liver and  
 other apparatus, without  
 which a recovery can not  
 be expected.

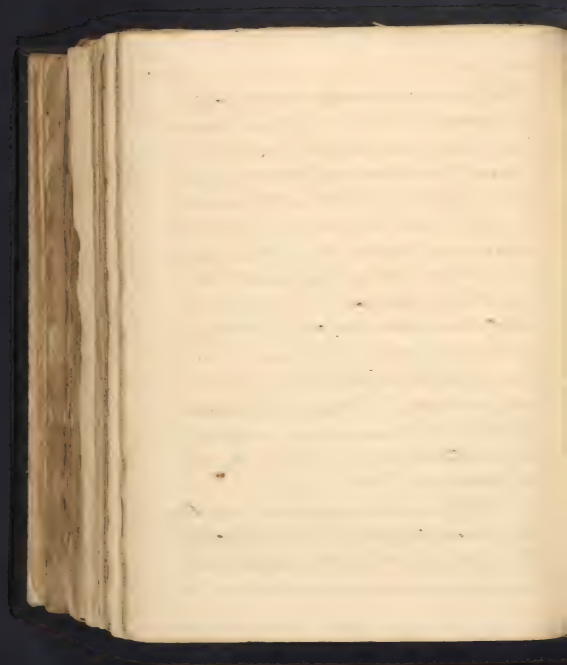
Unfavorable. The absence  
 of the favorable symptoms  
 above enumerated, incessant  
 vomiting of whatever is taken



into the Stomach, Cold damp  
 Surface, hark haggard coun-  
 tenance, Small thread-like pulses,  
 much general irritability, Bur-  
 ging of gray coloured stools,  
 or when the stools are of a pink  
 colour, or of greeny fetid water,  
 the child sleeping with his  
 eyes half closed, Comatose, or  
 with occasional convulsions.

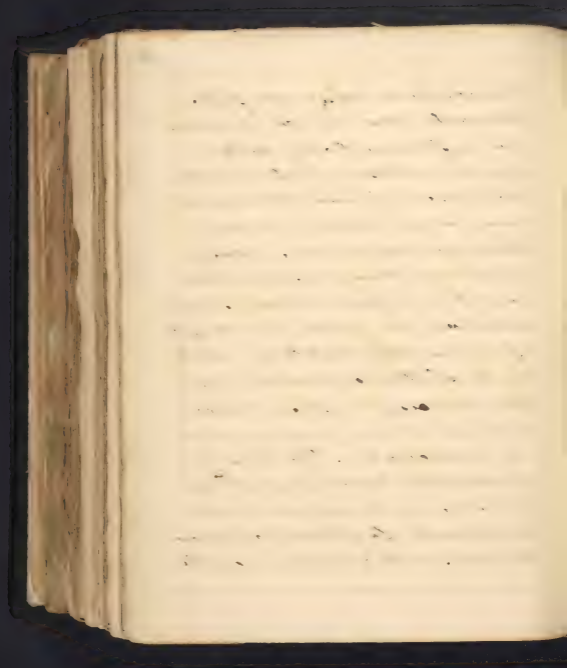
In protracted cases, there  
 are affusions on the serous  
 Surfaces, and then the Viscera  
 of the Thorax may suffer,  
 and the Brain, as in Hydro-  
 cephalus.

Dissections inform us, that  
 the force of this disease is chief-  
 ly expended on the alimentary



Canal. The mucous coat of the Stomach, and Small intestines, are inflamed, Coagulable lymph is thrown out, and their coats are softened, thickened and sometimes ulcerated.

The large intestines are seldom much involved, except the disease has become chronic and diarrhoea persisted for a length of time, then the large intestines exhibit alterations of the mucous surface, similar to those already indicated in the small ones. The liver in protracted cases is much enlarged, and sometimes indurated, and of a yellow or straw colour, and occasionally the

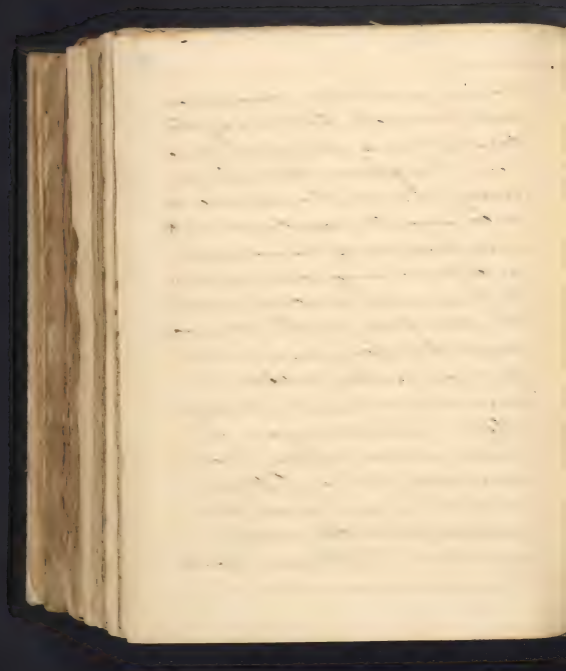


Peritoneum takes on inflammatory action. The liver though much enlarged, in a majority of instances, presents no alteration of structure, but is merely enlarged or distended by congestion, a state of things originating from stasis in the portal circulation. The gall bladder is sometimes found distended with a dark green bile & Vice Versa. The other viscera are sound.

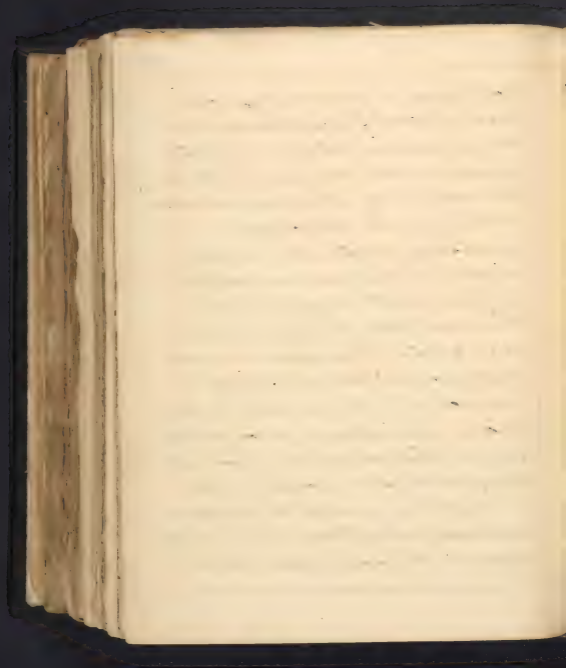
Treatment. Called to a patient labouring under Cholera Infantum the first indication is to evacuate completely the alimentary canal. To do this

My dear friend, I have just received  
your letter of the 14th inst. and am  
glad to hear from you. I am well  
and hope these few lines will find  
you the same. I have not much news  
to write at present. I am still  
in the same place, and my work  
is not very interesting. I have  
just finished a book on the history  
of the city, and it is now in the  
hands of the printer. I hope it will  
be published in a few weeks. I  
am sure it will be of some use  
to you. I have also written a  
few lines on the same subject, and  
they are now in the hands of the  
editor. I hope they will be  
published in the next issue of the  
journal. I am sure they will be  
of some interest to you. I am  
very truly yours,  
John Smith

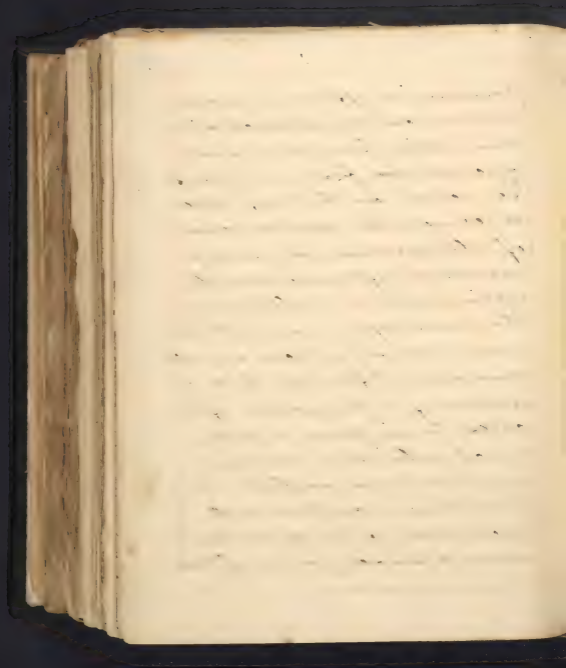
some practitioners commenced  
 with Emetics, but to say the  
 least, it is a dangerous prac=  
 tice. Purgatives are more gen=  
 erally preferred, Castor oil, in  
 mild attacks, combined with  
 a drop or two of Laudanum,  
 will prove adequate to a cure.  
 But in more violent attacks,  
 the irritability of the Stomach  
 must be allayed, before  
 purgatives can be adminis=  
 tered. To do which, Strong  
 Coffee without Sugar or  
 milk in tea spoon full  
 doses every ten or fifteen  
 minutes is very good, lime  
 water and milk, anodyne  
 injections. D<sup>r</sup> Dewees speaks



highly of injections of com-  
 mon salt, fomentations to  
 the abdomen, blisters over the  
 region of the stomach &c &c.  
 This end being attained we resort  
 to purgatives, Calomel is  
 generally preferred, it may  
 be given alone or in combi-  
 nation with Magnesia, or  
 Rhubarb, the use of which  
 should be persevered in, until  
 natural discharges from the  
 bowels are procured. Calo-  
 mel is peculiarly well adap-  
 ted to this disease, from its  
 being without taste, from  
 its not being apt to produce  
 nausea, and from the small-  
 ness of the dose required to

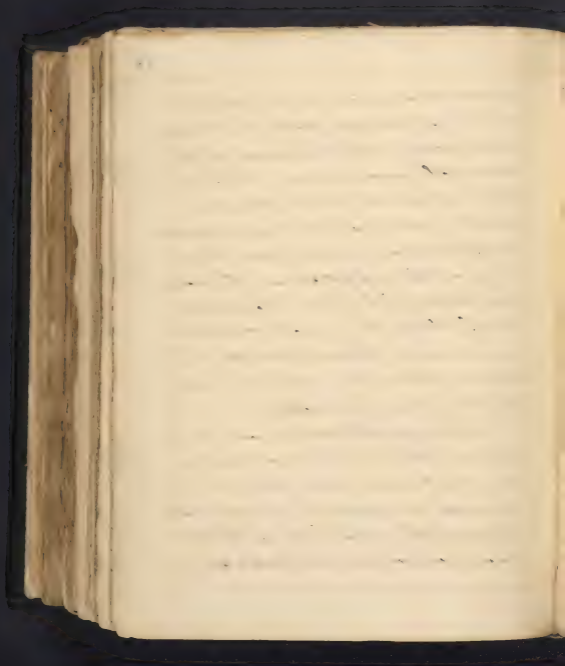


produce its effects, it will be retained on the stomach, when most other Purgatives will be rejected, and from its specific action on the liver, when it corrects the morbid actions of the intestines, it exerts a sanative influence over the system, not to be obtained in the same degree nor with the same certainty from any other medicine. After the free operation of a purgative, if the child be in pain, or pretty much exhausted, Anodyne injections are useful. Some practitioners combine with each dose of Purgative Medicine, a small portion of Opium



in substance, or in texture, it  
 more effectually Relieves Spasms  
 and allays the Irritation of the  
 Stomach and bowels. Where  
 there is much fever attended  
 with great gastric distress, much  
 benefit will result from bleed-  
 ing, or the application of leeches  
 over the region of the Stomach,  
 or if there be much cerebral  
 excitement, blood should be  
 drawn from the arm or from  
 the temples by leeches.

Should the irritation of the  
 Stomach and bowels contin-  
 ue, Calomel and Opium  
 should be given in small doses  
 frequently repeated, with the  
 occasional administration of



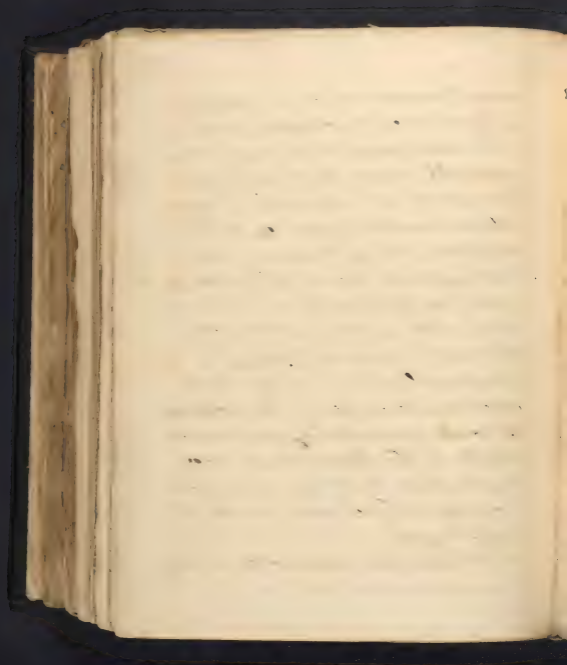
some mild laxative so as to  
 evacuate completely the ali-  
 mentary canal. This being done  
 and the healthy secretions  
 restored, all that is necessary  
 is to keep the bowels in a sol-  
 uble state, unless there should  
 be accumulations of bilious  
 matter, or of Hepatic corpus and  
 congestions, when the same rem-  
 edies are to be resorted to. But  
 if irritation be excessive, as  
 manifested by a frequent and  
 painful discharge of thin  
 watery stools, anodyne injec-  
 tions should be administered  
 three or four times in the course  
 of twenty four hours. The oc-  
 casional administration of a

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mild Laxatives will be necessary if fecal accumulations exist.

In addition to the above means the warm bath should be added, it equalizes temperature and determines to the surface, its effects are not lasting, therefore it should be repeated three or four times a day. Where there is much cutaneous insensibility the beneficial effects of the bath will be increased by the addition of some stimulating substance such as the Muriate of Soda Mustard or brandy and upon leaving it friction should be employed.

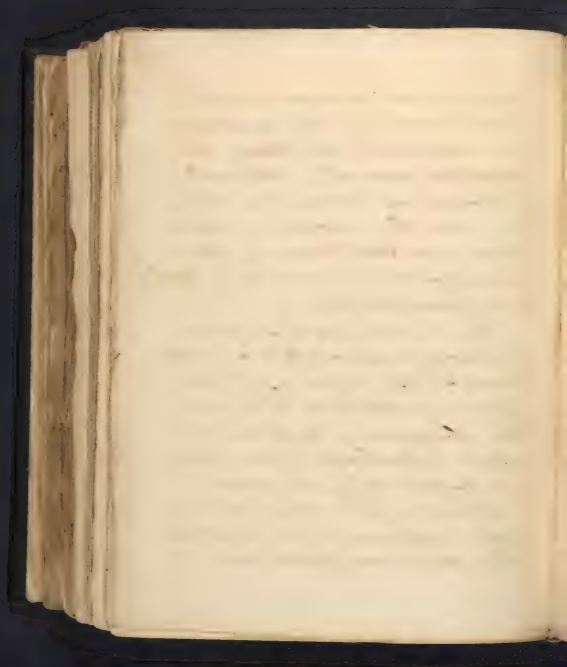
Blisters are serviceable in any



stage of the disease, if the distribution of temperature be unequal, they may be applied over the stomach, abdomen or extremities. Blisters over the abdomen where there is a hot burning skin should be preceded by leeches & fomentations.

This treatment however proving unsuccessful, a combination of sugar of lead, Specacuanha and Opium. The oleaginous mixture or what is perhaps better, Mucil. a butyr may be given.

After a few days, or in some instances a week or more, the disease puts on



the nature of Diarrhoea. The  
Creta or Alkaline preparations  
are then to be resorted to. They  
may be given as follows.

R<sub>4</sub> Cret. Prep ℥ss  
Gum. Arab. ℥  
Sacch Alb. aa ℥ss  
Linet. Opie qtt x  
Aqua Font. ℥iij M.

R<sub>4</sub> Sal. Tart. vel Carb. Sod. ℥ss  
Gum. Arab. ℥  
Sacch Alb. aa ℥ss  
Linet. Therb. qtt x  
Aqua Font. ℥iij

M. & oralis Spoon full every  
two or three hours. Lime water  
and milk are also useful.

At this stage of the disease



the preparations of Rhubarb may be resorted to with benefit. The following formula may be given.

R<sub>y</sub> Pul. Rhei gr x v  
 Cal Mag ʒj.  
 Sacch alb ʒj  
 Tinct opii ʒt x  
 Oil Anis ʒt x  
 Aqua Font ʒij M.

dose a tea spoon full every three or four hours. Other preparations of Rhubarb are useful, the spiced, or simple Syrup of Rhubarb combined with Laudanum should be given in small doses at stated intervals, so as to obtain its tonic & astringent virtues.



As the disease advances it becomes a colliquation. Riverhosa, how the same treatment should be resorted to, as in the chronic stage of this disease, in the advanced or middle aged. Combinations of Chalk, with the tincture of Kino, or an infusion of Galls & Laudanum, The Columbo in infusion, or infusion of Sassafras, the decoction of Pomegranate bark, or flowers, with a small portion of Nux. Marshata, have all been administered with advantage. The dose of these preparations is the same, or nearly so, a tea spoon full,



or more according to the age of the child, may be given at short intervals.

A strong infusion of the Dewberry root is much commended.

Saccharum Saturni, combined with Opium, may be also advantageously employed.

The chalybeates are much used, the best of which agreeably to Professor Chapman is the Super Saturated Sulphate of Iron, in the following formula

R<sub>y</sub> Sul. Iron gr<sup>ss</sup> 11

Acid Sulph gr<sup>ss</sup> x

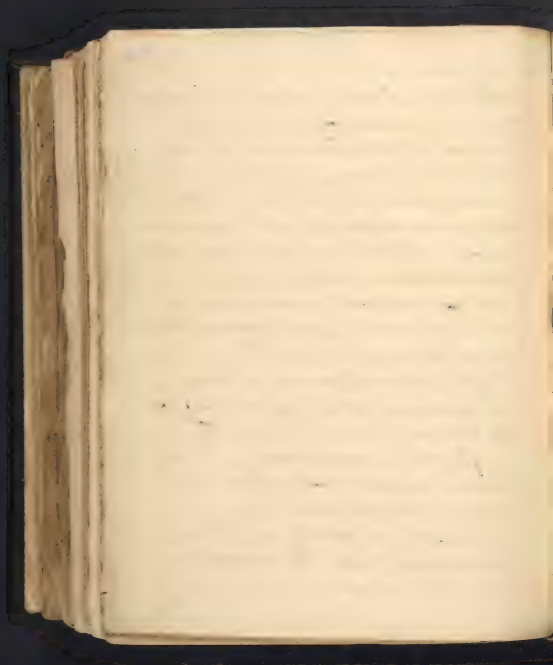
Sacch alb ℥j

Aqua Font ℥j m Dose ℥j

Calomel here becomes necessary,



where we have reason to suspect  
 hepatic derangement, or Vice=  
 ations of the humors of the  
 bowels, it may be given in  
 small doses combined with  
 Opium. Spirits of Turpentine  
 under these circumstances, where  
 the mucous liquor of the bow=  
 els is much disordered, as  
 manifested by a loaded tongue  
 and slimy stools, has proved  
 highly beneficial, it may  
 be given in doses of from five  
 to ten or fifteen drops, three,  
 or four, times a day in a  
 little sweetened water. An=  
 odyne injections may be  
 useful. Lastly a flannel  
 roller around the abdomen,



in relaxed states of the intestines, has been resorted to with benefit.

Regimen. In the commencement, or acute stage of the disease, the diet should consist of breast milk; if the child be weaned or will not take the breast, let it be fed on sweetened milk diluted, Sweetened mullago of gum Arabia, Barley or rice water, weak mint or Marsh mallow tea, or toast & water.

In the advanced stages, the farinaceous articles may be given, such as Sago, Rice Arrow root &c. Where extreme debility of the stomach and



Lawels exist, a little ham,  
or salt fish may be given

But the best remedy is  
change of air, as long as  
the child remains exposed  
to the exciting causes of this  
disease, it will be almost impos-  
sible to effect a radical cure

It should be removed to a  
healthy country seat, which  
is attended with the happiest  
consequences in every stage of  
the disease. When a country  
residence can not be obtain-  
ed, riding it out of the city  
once or twice a day will be  
highly beneficial.

Thus gentlemen have &  
completed: an essay in Com-

I have been thinking of you  
 in the last few days, and  
 wondering how you are getting on.  
 I hope you are well and happy.  
 I have been very busy lately,  
 but I have managed to find  
 some time to write to you.  
 I have been thinking of you  
 in the last few days, and  
 wondering how you are getting on.  
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 I hope you are well and happy.  
 I have been very busy lately,  
 but I have managed to find  
 some time to write to you.

pliance with a regulation  
of the University, and I sub-  
mit it to your consideration  
earnestly hoping that you  
will excuse its brevity as  
well as its defects. I how-  
ever can not conclude  
without tendering to you  
individually my warmest  
thanks for the valuable  
instruction, which I have  
received by an attendance  
on your lectures.

